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PLANNING AND DESIGNING FEE DEMONSTRATION PROGRAMS: A REVIEW OF RECENT LITERATURE

PLANNING AND DESIGNING FEE DEMONSTRATION PROGRAMS: A REVIEW OF RECENT LITERATURE

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EXECUTIVE SUMMARY

Now approaching its sixth year, federal lands' fee demonstration programs provide approximately $200 million to nearly 400 recreation sites. Now considered by natural resource managers and administrators as beneficial, even essential to basic operations, the Bush Administration is asking for an extension and expansion of these programs. Research and literature related to the acceptability and evaluation of fee programs can indicate how future initiatives can be developed and existing programs improved.

Researchers evaluating fee programs suggest that justification to the public for establishing a user fee requires explicating how fees meet broader agency and site objectives, how revenue will be used, and how recreation experiences will be improved. It may be helpful to state what principles are the bases for developing fee programs. For example, while recreation may be improved, a management principle may be that changes will not adversely affect the land resources. Other principles may address recreational use, access, and equity. By specifying these principles, the public knows the agency's and site

manager's position on fee use and recreation management.

Developing the actual fee program requires an accurate assessment of recreation demand to determine what fees users will accept while generating revenue. It's also important to consider the actual costs of implementing the fee program. Some uses, such as camping, are perceived as more appropriate for a fee requirement. The acceptability of fees can be determined through surveys of visitors to determine the desired types of recreational opportunities. Classification systems such as Experienced Based Management can be helpful in measuring demand for recreational opportunities.

One complex question is how fees will be collected and implemented. For example, issues of day passes versus those for longer periods, or different fees for designated user groups (e.g., seniors, local residents), can increase both acceptability and complexity. All of these involve issues of equity. The public both supports fairness in access and differential pricing. There are concerns that fees will deter lower income users from visiting public lands. At the same time, much of the public supports the idea that those who use the resource the most should pay more. How agencies respond to these issues affects public acceptability and compliance with fees.

Gaining public acceptance is dependent on addressing a range of concerns. While there is a diversity of issues, most center on: fairness (e.g., whether fees are a form of double taxation); equity (e.g., who should pay and how much); and how fees are collected, administered, and used. Addressing these concerns must come from Congress, the agency, and researchers.

Lastly, fee programs should be evaluated for their effectiveness: how well they meet specific recreation objectives. They should also be evaluated for public acceptability using a consistent methodology and approach for all agencies and sites. There is also a need to determine whether the fee demonstration program is successful in providing improved quality recreational opportunities, and not just in terms of dollars generated or removal of maintenance backlogs.

Fee programs are popular with managers and administers because of their potential to provide new and needed revenue for operations, maintenance, and improved recreation. While public acceptance appears to be favorable, some users, including environmental groups, are skeptical and question whether charging fees will alter the relationship between agencies and the public to a more commercial exchange. It's important to continue examining feedback from existing programs to ensure future success and to determine whether the ultimate objective of the fee demonstration program is met – that of providing quality outdoor recreation.

INTRODUCTION: THE FEE DEMONSTRATION PROGRAM

In 1996, Congress established the Omnibus Consolidated Rescissions and Appropriations Act, which directed four federal natural resource agencies (U.S. Forest Service (USFS), National

Park Service (NPS), U.S. Fish and Wildlife Service (USFWS), and the Bureau of Land Management (BLM)) to implement fee demonstration programs in order to help recover the costs of managing for recreational opportunities on public lands. The most important component of this Act is that it allows for at least 80% of revenues derived from the fee programs to be retained at the area where they were collected. Prior to this, fees collected on site have often been returned to the agency and allocation of funds was not based on revenue generated from the original area. The idea of fees remaining in situ, provides several advantages. First, funds collected are actually used for the site's management. Part of the requirement of the fee demonstration program is that allocation objectives must be specified prior to program implementation. Therefore, dollars actually go toward specific projects related to the area's improvement and maintenance. Second, since funds are returned to the site, there is increased motivation by area managers to design and implement an effective fee collection process. Third, users of the area may be more supportive of fees applied to areas they are using and for which they can see resulting benefits. Because users are paying, they want to know where the money is spent, encouraging management accountability (More, Dustin, & Knopf, 1996).

While there are apparent benefits of having funds to help maintain and operate natural areas, there are also challenges in:

1) deciding whether a site warrants a fee program,
2) how best to plan for and implement it,
3) gaining public acceptance,
4) determining the best use of funds, and
5) providing for an evaluation of the program.

These 5 challenges must be addressed by all fee programs prior to imposing a fee system. The

following report examines each of these issues and provides some guidance, based on recent literature in nearly 70 articles, that managers may wish to consider in developing future fee demonstration programs.

JUSTIFICATION FOR FEE DEMONSTRATION PROGRAMS

Ostensibly, the reason most managers are interested in establishing a fee demonstration program for their area is to increase the amount of funds available for operating and maintaining the site's resources. Fees may even improve the quality of a resource area, the recreation experiences provided, and help recover costs that can no longer be offset by appropriations from tax dollars (Harris & Driver, 1987; LaPage, 1994). Programs that can clearly indicate how funds will be spent and can show visible results in the form of improved facilities tend to be viewed more favorably by agencies. However, increasing revenue and funding capital projects as the primary justifications for the fee demonstration program has been questioned. In a review of literature evaluating fee demonstration programs, Martin (1999) suggests that fees are not being linked to broader agency policy and philosophy, which would provide a stronger reasoning for their implementation:

> In other words, the fee programs appear to be viewed simply as a means to fund specific project needs, not as a tool to realize any broader agency goals or vision.

More (1999) questions the justification of fees based on economic efficiency and revenue needs. While research has indicated that fees lead to increased economic efficiency, supposedly maximizing benefits to society, (Leuschner, Cook, Roggenbuck, & Oderwald, 1987; Walsh, Peterson, & McKean, 1989), it has been difficult to prove these benefits explicitly. More (1999) argues that it is important for agencies to remember that they exist to serve the resource and that

they are not entities unto themselves. Therefore, fees should only be used to ensure the function and purposes of the resource are preserved, not based on the agency's justification or to protect their own existence.

Martin (1999) argues that agencies have made little progress toward answering the question of "When (under what conditions) is it appropriate to charge recreation fees?" He also points out the need for establishing criteria to determine when a fee program is warranted and the minimum standards a program must meet. This is a fundamental question that agencies must answer at the larger level before sites can be selected. However, management areas have a responsibility to indicate how a fee demonstration program at their site fits in with the larger mission and goals of the agency, as well as the site's management. Obviously, there will still be an emphasis on using funds to help with the increasing costs of operating and maintaining natural areas, and projects that can show discernible improvements from fee revenue will be evaluated positively. However, these improvements can include both more tangible objectives (e.g., better maintained trails, increased law enforcement) and less tangible objectives, such as increased visitor satisfaction and higher quality visitor experiences.

These concerns illustrate the importance of ensuring that fee programs fit within both the agency's and local area's management plans and goals. The fee demonstration programs within agencies would benefit from specific goals and objectives. At the site level, the objectives of the fee demonstration program should go beyond describing how funds will be spent, to long-term goals for the program.

Summary points to consider in justifying the development of a fee demonstration program:

- Managers should be able to show how fees will complement the agency's mission of resource protection and sustainability, and provision of quality recreation.
- Fees should be linked to agency goals and philosophies.

- The fee program for a site should fit within the overall management plan, and goals and objectives for the site.
- Programs should explicitly indicate how fee revenue will be used.
- Managers should consider indicating how fees will be used to improve recreationists' experiences and other social objectives (e.g., increase visitor satisfaction).

PLANNING FOR AND IMPLEMENTING FEE PROGRAMS

Principles for Developing Fee Programs

Manning, La Page, Griffall, and Simon (1996) developed a set of principles that may be used to guide the design and implementation of recreation fee programs (Table 1). Martin (1999) conducted an evaluation of the four agencies in terms of these principles and concluded they were performing fairly well on all but four principles. First, more information is needed to assess the costs and benefits derived from a fee program (principle number 4). Second, fees need to be linked to broader agency goals and policies, rather than mere project task lists, as discussed previously. Third, agencies are too focused on recovering costs and generating revenue and should, instead, concentrate on improving visitor experiences. This again, points to the need to develop objectives related to the agency's responsibilities for providing quality service while ensuring stewardship of the resource. Lastly, few agencies or site managers are providing an evaluation of their fee programs. This issue is addressed later in this paper.

Determining Fee Levels and Recreation Demand

To improve determination of costs and benefits of fee programs, economic studies can help indicate the value the public has for recreation areas and services (Schroeder, Dwyer, Louviere, & Anderson, 1990). These values can be weighed against an accounting of costs for managing these areas and providing services. For example, we can determine the public's willingness to pay (Adamowicz, Louviere, & Williams, 1994). When a fee program is proposed, research is

Table 1. Principles for Developing Fee Programs (Adapted from Manning et. al., 1996).

1) Fee programs may have a legitimate goal of managing visitors in order to ultimately protect the resource and provide an enjoyable visitor experience. This principle addresses the idea discussed earlier of fee programs being part of larger goals, rather than outlining the cost needs for specific projects and operations.
2) Everyone who uses an agency's facilities and services should share in the costs of their provision.
3) Those who benefit from these services and facilities should pay a greater share of the costs.
4) Fees should be determined based on the best available information regarding the costs of providing the services and facilities.
5) Revenue from fees should be used for resource management and providing access to these resources.
6) Revenue from fees should only represent a portion of the funds need for management, and should not become a substitute for societal investment in our natural resources since everyone benefits in some way.
7) Fee objectives should be linked to specific projects and outlined costs.
8) Fees should primarily stay with the site where they were collected and the remainder to be allocated to a revenue sharing policy.
9) Fee programs should be structured so that managers are motivated to collect them and visitors are motivated to pay them.
10) Fees should be clearly linked to demonstrable improvements in operations, cost controls, development of partnerships, and accountability.
11) Fees should be associated with improvements in the quality of services and facilities.
12) Establishment of fees should consider private sector fees and the impact on local communities.
13) Managers should be encouraged to consider issues of equity in administering fees, local situations and impacts, and potential constraints.
14) Part of the revenue from fees should be used for an ongoing evaluation of the fee program.

often conducted to determine the acceptability of fees at various price levels. Common approaches for measuring fee acceptability and determining values for natural resources include contingent valuation methods (e.g., willingness to pay) and travel cost methods (Adamowicz, Boxall, Williams, & Louviere, 1998). These studies can indicate the impacts of fees on revenue (Becker, Berrier, & Barker, 1985; Fesenmaier & Schroeder, 1983) and participation, when revenue is maximized, and when displacement is so great revenue actually declines (Reiling & Kotchen, 1996).

For example, Richer and Christensen (1999) asked wilderness users both their maximum willingness to pay and the fee that they thought was actually appropriate. The average willingness to pay was greater than the mean for what would be considered appropriate. In this study, the fee at which revenue would be maximized resulted in a 52% decline in visitation. Alternately, at the "acceptable" mean fee level, there would be only a 17% decline in visitation. This approach helps indicate how managers must evaluate tradeoffs of cost recovery and revenue maximization versus ensuring access and preventing unacceptable displacement (Becker et al., 1985; Schneider & Budruk, 1999).

In the past, fees for day use areas were considered to have little impact on visitation rates. In economic terms, this indicates that day use fees are price inelastic, meaning the demand for these areas is insensitive to price and that people will continue to come despite fees. Other research shows that day use fees do impact visitation rates (Stevens, More, & Allen, 1989). What is deemed unacceptable displacement is difficult to define because fees may partially serve to reduce congestion to an area and distribute use (Manning, Callinan, Echelberger, Koenemann, & McEwen, 1984).

Ajzen, Rosenthal, and Brown (1996) found that willingness to pay can be influenced more by perceptions of equity or who should pay what, than by the perceived value of the good itself. The public may perceive fees are not appropriate if benefits are unequally distributed, especially when commercial users are charged the same fee as noncommercial users but are perceived as receiving more benefits. Willingness to pay is also affected by perceptions of costs. If recreationists are informed of the actual costs of management and operations, they are more likely to think the fees covering these costs are fair (Kyle, Kerstetter, & Guadagnolo, 1999; McCarville, 1991; McCarville & Crompton, 1987). Vaske, Donnelly, and Taylor (1999) found

that users who understood why fees were being charged and their importance in providing quality services were more likely to consider the actual fee levels as "about right." By providing information on costs, recreationists are adjusting their reference price or what they consider a fair price (Kyle et al., 1999). Reference prices are also influenced by whether the visitor has ever incurred fees (Kerr & Manfredo, 1991) and what the last fee paid was (McCarville, 1996).

These types of economic studies can also be used to indicate demand for resources and experiences (Schroeder & Louviere, 1999) and gather input on spending priorities (Vogt & Williams, 1999). Measurements of demand can indicate interest in an area, specific activities or services desired, and what attributes of recreation experiences are important to individuals (Siderelis & Moore, 1998). This is important so that managers know what needs more attention, and therefore more funds, and helps determine what things the public would be more likely to pay for and demand.

While these studies can help determine acceptable fee levels, it's important for managers to determine the actual revenue needs. If costs to be recouped from a fee program can be recovered at a fee less than visitors' willingness to pay, then a fee set at cost recovery can meet both needs for revenue and access. It's therefore necessary to have as accurate an accounting of costs and needs as possible (Martin, 1999). Finally, costs of implementing the fee program should be factored in as well. Visitors who are provided with information regarding the costs to be recovered from fee programs are more likely to support fees and be willing to pay in amounts that would cover these charges (McCarville, 1991; McCarville & Crompton, 1987).

Designing Programs to Address Visitor Experiences.

Often managers will have specific expenses, maintenance costs, and projects that they wish to fund with fee revenue. For example, additional funds may be needed simply to operate

and maintain some recreation areas. There may be an interest in providing or improving certain facilities such as campgrounds or trails. While these concrete objectives help explicitly show how fees are being used, there is a need to link them to stewardship and visitor quality goals. In other words, what objective for visitor quality will be met by providing hardened trails or interpretive materials? Vogt & Williams (1999) found that visitors to Desolation Wilderness in California preferred using recreation fees for maintenance and to restore wilderness, rather than providing more development and services. It is important for managers to develop broader management and recreation goals that match public interests before determining specific projects to be funded by fee revenue. Goals can be based on the types of opportunities and experiences provided by an area's resources (Manfredo & Larson, 1993).

Classification systems, such as the Recreational Opportunity Spectrum (ROS), can be used to describe an area in terms of its setting, resources, and management approach (Brown, Driver, & McConnel, 1978; Driver & Brown, 1978). These descriptions can then help indicate potential or existing recreational opportunities. After determining what opportunities will be provided, objectives are developed which state the mechanisms for providing these opportunities, such as site enhancements. Experienced Based Management (EBM) is another approach that can be used to describe desired recreational experiences (e.g., in terms of the setting, resource characteristics, activities), and then develop a management strategy for providing these experiences (Manfredo, Driver, & Brown, 1983).

These approaches are based on a service philosophy advocating the idea of identifying and providing desired recreation experiences (Manfredo, Pierce, Vaske, & Whittaker, in press). Management actions are the tools, not the end objectives, for providing these experiences. Fee programs should, similarly, be able to link how funds will be used to address visitor experience

objectives. These experience objectives may already exist or can be developed as part of the planning approach for the fee demonstration program.

Approaches for Fee Collection

Once the purposes for the fee program have been clearly articulated, plans must include a method for fee collection. The simplest type of fee would be a single charge incorporating all the costs associated with one or multiple visits. However, visitor experiences will vary with different activities and services sought. There is some belief that visitors participating in some activities or facilities should be required to pay use fees or charged more. For example, the public is more likely to support fees for developed facilities like campgrounds (Bowker, Cordell, & Johnson, 1999).

Having separate charges for different activities or services complicates things for the visitor, who must not only pay more but may also be required to make several payments (Fix & Vaske, 2000). This makes ensuring compliance more difficult since multiple collection sites may be necessary. Implementing multiple or compounded fees becomes even more complex when concessionaires are charging separate fees for the services they provide. Agencies are increasingly using concessionaires to assist in both providing and maintaining services and facilities. Often these concessionaires will collect their fees separately from those charged by the agency in order to ensure funds go directly to the source. Because of the complexity arising from fees being charged at multiple sources, users are often frustrated and compliance is challenged. Fix & Vaske (2000) determined that while recreationists may be willing to pay fees, they are not willing to pay multiple fees, even if the total amount is the same. However, some studies show that recreationists are supportive of differential fees, for different activities or times of use (Vogt & Williams, 1999). This clearly indicates the importance of determining an

implementation plan that shows what fees will be charged and for what, how fees will be collected and where, how compliance will be encouraged, and how the simplest collection method possible will be sought.

Besides charging different fees for different activities, services, and facilities, managers should consider whether charges will vary by user. For example, will local residents, seniors, or those on a reduced income be given a reduced rate? Will charges vary temporally, such as by season or weekday versus weekend? Will packages be provided such as one-day fees, weekend, week, or annual passes? Will charges be made per individual, per car, or per group (the size of group needs to be specified)?

Summary points to consider in developing and implementing fee demonstration programs:

- The ultimate goal of fee programs should be focused on resource management, ensuring access to recreation areas, and providing quality recreation experiences.
- Everyone who uses and benefits from an area's resources, facilities, and services should share costs.
- There should be an estimate of costs for each project that will be covered by fee revenue. The total costs to be recovered from fee revenue should include the costs of administering the fee program.
- Research can help determine the actual amounts recreationists are willing to pay, provide revenue projections, and indicate the impacts on participation.
- The implementation plan should specify what fees will be charged and for what, whether there will be one fee or separate fees for different services (e.g., entrance fee, campground charges), whether charges will vary by user, how fees will be collected (e.g., entrance stations, collection boxes) and where (access points), and how compliance will be encouraged.

Gaining Public Acceptance

Fee Fairness and Equity

When designing a fee demonstration program one of the most important considerations is determining and encouraging public support. Managers considering the use of new fees need to

know how their different public segments will react to the pricing of those fees and what can help make the fees acceptable (Kyle et al., 1999). Seeking public acceptance is probably the greatest challenge of fee programs, at both the agency and local level (Watson, & Herath, 1999). Because agencies are managing resources for the public, there is a real and sincere obligation to be accountable. The need for fees must be balanced by the need to provide access to the resources the public, in effect, owns. Since the land and resources, managed by agencies, belong to the public, and are paid for by taxes, there should be adequate access to these resources for everyone. This question of public access is most commonly framed as a concern for equity or fairness in how or whether fees are charged. For example, a common concern is that fees are not "fair" because the public already pays taxes (Clifford, 2001). Probably the two groups considered most impacted by fees are those with lower incomes (More & Stevens, 2000) and those who live near the resource and use it the most (McCarville 1995).

In a progress report to Congress (USDI, 1998), a section titled "Fees to Promote Equity" states that an objective of fee programs may be to ensure no one is excluded by the fees. However, fees may deter those who cannot afford them from enjoying the very resources they own (Reiling, Cheng, & Trott, 1992). Fixed price fees are a greater burden for those at lower income brackets because they constitute a larger proportion of their income. More and Stevens (2000) found that low-income individuals were more likely than those with higher incomes to reduce visitation or become displaced at recreation areas with recent fee increases. Additionally, because socio-economic brackets are often correlated with ethnicity, there is some belief that minority groups may be disproportionately impacted. However, the research is mixed with other studies showing little or no effect of income or other socio-demographic variables (Vaske, et al., 1999). These socio-economic groups are already under-represented in natural resource

recreation, and these discrepancies further the criticism that natural areas tend to be playgrounds for the affluent (Bultena & Field, 1978; Vaux, 1975). This has led some agencies such as the USFS and NPS to try providing discounts or free access to visitors willing to identify themselves as having limited means (Martin, 1999). Seniors, who typically have limited incomes, are another group who may be more economically impacted (Stevenson, 1989). Golden Age (for seniors) and Golden Access (for disabled individuals) passes provide lower fees, and it's easier to identify these groups, via drivers' licenses.

Besides economic disparities, the public and agencies have also debated the idea of different fees for different users. The USFS has found that differential pricing increases the public acceptance of fees (Fretwell, 2000). For example, locals often feel they deserve a reduced fee. They are more likely to use the resource and are often voluntary stewards for an area. They also tend to have more say when decisions regarding an area arise. Locals and others who use the resource more frequently often benefit from the availability of annual passes, reducing the per visit charge.

Some individuals believe that some uses should incur a greater share of costs because they impose greater impacts to resources. Uses that include facilities, such as developed camping or boating, are often considered more acceptable targets for fees (Bowker, et al., 1999; Fesenmaier & Schroeder, 1983). Whereas, wilderness users feel that fees are inappropriate because there is little perceived costs with these areas (e.g., no facilities) and that fees are a form of constraint that goes against the idea or philosophy of wilderness experiences being less regulated (Bowker et al., 1999; Christensen, Borrie, & Williams, 1998; Trainor & Norgaard, 1999; White, Cobus, Manning, Seffel, & More, 1995; Williams, Vogt, & Vitterso, 1999). Support for fees in some wilderness areas is divided among those who think fees go against the

wilderness philosophy and those who have a significant attachment to a place and consider it important enough to support fees for its maintenance (Williams & Watson, 1998).

Fee acceptance in other areas is similar, with some users placing a high value on places important, unique, or lacking substitutes, and other recreationists becoming displaced (Rosenthal, Loomis, & Peterson, 1984). In a study of how fees affect National Wildlife Refuge visitors, Taylor, Vaske, Shelby, Donnelly, and Browne-Nunez (in review) found attitudes toward the fees and their justification was a greater predictor of intended displacement that socio-economic variables, such as income. They suggest that concerns regarding recreation fees, at least in terms of eventual displacement, may be unfounded. However they acknowledge that displacement may have already occurred by the time fee programs are evaluated and visitor responses studied. All of these issues require that agencies and managers consider whether fees are not just fiscally appropriate, but psychologically acceptable as well.

In some instances, there is more value for an area that is not being used or visited at all, indicating the value the public has for an area merely to exist (Glass, More, & Gilbert, 1992). Therefore measures of displacement or continued visitation would be inappropriate to determine the acceptability of fees. For some individuals, an area has value whether it is visited or not. While the idea of preserving an area for non-use is controversial (More, Averill, & Stevens, 1996), this existence benefit is not recovered by fees, but indicates why taxes may still be considered important in sharing the costs of public resources. The idea of shared benefits and shared costs is similar to Ajzen et al.'s, (1996) concept of equity, which proposes that all who benefit from a resource should share in its cost.

Agency Response to Public Concerns

Martin (1999) reviews how well agencies have been in responding to 20 public concerns for fees (Table 2).

Table 2. Public concern for fees (Adapted from Martin, 1999).

(1)	Fairness of fees is questionable since users already pay taxes.
(2)	Recreation is a public good and should be paid for by taxes.
(3)	Recreation areas are a national heritage and should be accessible to everyone.
(4)	Locals who visit more often will pay more in fees.
(5)	Low-income users are affected more because fees make up a greater portion of their income.
(6)	Fees may not be equitable among different user groups (e.g., backcountry users vs. individuals at developed sites).
(7)	Inequity exists between noncommercial users and commercial users who realize a profit from the resource.
(8)	Fees may lead to over-management of an area.
(9)	Management decisions will become driven by revenue considerations rather than as part of policy goals and objectives.
(10)	Fee revenue will be used inappropriately.
(11)	Fee revenue will replace appropriations thus erasing net gains.
(12)	Fees will become easier to use than seeking appropriations from Congress.
(13)	Fees will change the roles of visitor and agency to that of buyer and seller and thus change the nature of the social exchange.
(14)	Fees for Wilderness Areas go against the nature of these experiences that are supposed to encompass freedom, autonomy, and escape.
(15)	If fees are charged, more facilities will be expected.
(16)	Fees are inappropriate if there are no facilities or services for an area.
(17)	Charging fees may displace visitors to non-fee areas.
(18)	Fees may discourage volunteerism and stewardship.
(19)	In some areas, fees may be difficult to implement and inconvenient for visitors.
(20)	Fees imply that natural resource areas only benefit those who use them and not society at large.

Martin (1999) suggested that five of the above concerns are political and beyond the scope of agencies' abilities: (1) fears of double taxation, (2) that recreation is a public good and should be paid for by everyone, (3) recreation areas are a national heritage and should be accessible to everyone, (7) inequity between commercial and noncommerical users, and (11) concerns that fees will eventually replace appropriated funds. Three concerns were perceived as research questions: (13) do fees change roles to buyer and seller, (15) do fees increase

expectations for services and facilities, and (17) do fees displace users? Four concerns were evaluated as being adequately addressed by agencies: (4) To address local users, annual passes reduce per visit costs; (10) agencies appear to plan for and spend fee revenue accountably and appropriately; (19) agencies are trying to make fees convenient and easy to comply with for users; and (20) the concern that fees imply that only users benefit and that eventually this will mean fees will become the only source of revenue is contradicted by the fact that few fee demo sites rely on fees for 100% cost recovery.

However, Martin (1999) argues that agencies are not adequately addressing the other eight concerns: (5) Low income users may indeed be deterred from visiting recreation areas; (6) equity of fees among different user groups has not been addressed; (8) fees may increase facilities and management; (9) decisions are increasingly influenced by revenue considerations; (12) charging fees may become easier than seeking appropriated Congressional funds; (14) charging fees for some areas runs counter to their nature, such as wilderness; (16) fees may be charged in areas with no facilities; and (18) volunteerism may decline. It is important that agencies continue progress on all the concerns within their control, and begin to address the tougher issues that have not yet been tackled.

Because public acceptance of fees is influenced by perceived value of the resource, trust in the agency, and beliefs about fairness and how revenue will be used, attention must be focused on making fees and fee programs more palatable, especially where there have been no previous charges (McCarville, Reiling, & White, 1996). Typically, individuals are more willing to pay fees if they have done so in the past (Kerr & Manfredo, 1991). Kyle et al., (1999) found that individuals are more willing to accept a fee if they know that actual costs the fee will cover. This assumes that there is a level of trust that the agency is providing accurate and reliable

information. Trust is extremely important in acceptance of agency actions and may be the greatest predictor of fee acceptability, specifically trust that the agency will spend fees appropriately (Lime & Lewis, 1997; Winter, Palucki, & Burkhardt, 1999). Communicating to the public about the purposes of the fee programs and answering questions and concerns is an important approach for gaining public acceptance (Kyle et al., 1999). The USFS is addressing this need with a comprehensive website that describes the fee program, lists fee areas, provides reports indicating the status of the fee program, and answers the most common questions (http://www.fs.fed.us/recreation/fee_demo/fee_intro.shtml). These kinds of approaches help demonstrate accountability and encourage support for fee programs. Managers with knowledge of their public's acceptance of fees are more likely to design communications and programs that encourage support and compliance (McCarville, 1998; Reiling, Criner, & Oltmanns, 1988).

Summary points to consider in gaining public acceptance for fee programs:

- Equity and fairness in fees is an important issue and there should be some effort at addressing it. Managers need to consider how equitable their program is in addressing pricing and access, and should be able to justify their program's approach for ensuring fairness of fees and providing access.
- Special groups to consider include those who may experience greater impacts from fees, such as lower income groups, local residents living nearby, and others who use the resource frequently.
- To encourage support for fee programs, it is important to communicate to the public the reasons for the fees, objectives, how revenue will be spent, and updates on the current status of existing programs. This information is especially important in areas where there have been no previous fees.
- There is some debate whether certain areas or activities are more or less acceptable targets for charges. It appears to be more acceptable to charge fees for developed facilities. If fees will be charged for more controversial uses (e.g., Wilderness Areas), adequate information should be provided to the public regarding why the fees are justified.
- Support for fees can be increased by providing the public with an accurate accounting of costs and benefits. However, it's important to remember that fees only provide partial cost recovery. There are benefits to the public whether natural areas are visited or not, so costs should likely continue be shared and access ensured.

USING FEES

Fee revenue is typically used for three purposes: 1) providing new recreational opportunities, including development of facilities and services; 2) improving existing opportunities, services, facilities, and management; and 3) maintaining existing opportunities, services, facilities, and management at the current level of quality. Deciding on how fees will be used obviously occurs as part of the development and justification plan. As repeatedly discussed, fees should be used to meet the resource and recreation objectives of the fee program. These objectives specify how recreation experiences will be addressed. Fee revenue will be spent on actions that help address these objectives.

Managers are finding it increasingly difficult simply to make ends meet, so that some fee programs will have as a prime objective to maintain existing experiences. These programs are faced with seeking cost recovery relief to prevent declining quality in resource management and/or visitors' experiences. It's important that fees not necessarily replace appropriated funds because managers will be faced with seeking more fee revenue to maintain operations as costs increase. While some would argue that eventually agencies should become 100% cost sustainable (La Page, 1994), there is a risk that fees will become based heavily on economic needs rather than focusing on visitor experiences and resource stewardship (Martin, 1999; More, 1999). Also, some areas have important values but may be unable to solicit outside revenues, as in the case of remote wilderness areas, or ecologically important lands with little economic or recreation value.

There has been some concern that the fees would simply be used to pay for the administration of collecting the fees, but it appears that that largest portion of the new fees, more than 36%, is being used for repairs, maintenance, and protection of natural resources (Fretwell,

2000). Managers may identify the potential for new or improved recreational opportunities, and fees would be used to provide these experiences. Improved management of an area is often a strong justification for a fee program and improves public support. This does not necessarily mean provision of structures or facilities. In fact, some experiences will be matter of preserving the naturalness of an area, such as in wilderness. In some instances, users would prefer little or no new facilities or improvements because additional services may change the nature of the particular experiences (Martin, 1999). Recreationists at the Desolation Wilderness in California indicated that they would prefer fees be used to maintain the current level of service rather than for improvements (Vogt and Williams, 1999). It's important to determine when improvements or new services are warranted and when they are unwanted or unnecessary.

Summary points to consider in using fees:

- Fees should be used for actions that help meet management and visitor quality objectives. These uses should be specified in the fee program plan, prior to fee collection.
- Fees may be used to maintain, improve, or provide new opportunities.
- Programs that can show tangible uses and results may be more likely to retain support, however, important management needs may not necessarily entail "visible" structures.
- To encourage long-term support for the fee program, it would be advantageous to determine how the public would like to see fee revenue used.

PROGRAM EVALUATION

While fee demonstration programs are increasingly being implemented and managers believe these programs are successful (Krannich, Eisenhauer, Field, Pratt, & Luloff, 1999), there is a need for additional effort at conducting objective evaluations (Martin, 1999). Evaluations, in terms of impacts to management and visitation, are a mandatory component of the fee demonstration program. Each agency is dealing with this requirement differently, with the NPS, USFWS, and BLM focusing on visitor response surveys, and the USFS extensively using

comment cards (Krannich et al., 1999; also online at http://www.fs.fed.us/recreation/fee_demo/fee_intro.shtml). While these surveys indicate that visitors are satisfied with the fees they paid (Fretwell, 2000), the limitation of this approach at evaluating fee programs is that they fail to link performance with objectives.

Success of fee demonstration programs needs to be measured by determining whether previously stated objectives were met. These objectives, as discussed earlier, should be explicit and based on providing quality visitor experiences and ensuring responsible management of the resource. Unfortunately, few managers are actually undertaking any sort of evaluation. A study by Absher, McCollum, and Bowker (1999) shows that while managers find research useful to help develop their fee programs, they seldom collect any data to help evaluate success or failure of the fee program in terms of the program's objectives. They further report that the research managers do attempt tends to be more casual or informal.

In November, 2001, the United States General Accounting Office released a report that described a survey of managers on their perception of the fee program. While most managers evaluated the program positively, the study relied on managers' perceptions, rather than whether specific management or visitor experience goals were achieved. This kind of evaluation may be hampered because clear objectives for the program overall are not available or because sites vary in how they envision the purpose of the fee program. This also limits the usefulness of evaluating visitor surveys as a way of indicating overall program success.

Simply asking visitors to either indicate their perceptions and acceptance of the fee program or recreation area fails to demonstrate how the fee program addresses larger agency issues and missions. While these studies can indicate likely compliance and receptivity to the fee programs, they need to include measures indicating that the fee programs resulted in desired

outcomes, which may be maintenance or improvements in management and/or the quality of visitor experiences.

While evaluations at individual sites is essential, there still remains the need to evaluate the fee demonstration project overall, within and across agencies. This is not simply a matter of measuring revenue collected. While agencies and local managers who've participated in fee collection programs feel the fees are helpful and the program a success, the public is skeptical without hard evidence that the resource is being protected better than without the fees (Hayhurst, 2001). Receptivity is important and should be evaluated using consistent methodology for reliable comparisons. Also, the overall impact of these programs on the agency mission, service, and objectives would be beneficial.

The first challenge in conducting adequate evaluations is developing appropriate objectives. Objectives regarding revenue targets, creation of new facilities, and maintenance, do not indicate how the agency has improved visitor satisfaction or management. Fee program objectives should indicate targets for providing, improving, or maintaining (Vogt & Williams, 1999) recreation experiences and natural resource management. Objectives should be measurable and specify a realistic timeline for completion. It is unlikely there will be discernible improvements within the first year of a program (Krannich et al., 1999), especially when programs are designed to meet larger quality improvement objectives. It's therefore helpful to develop feasible targets over a period of time.

Although provision of facilities is an implementation tool for meeting objectives, these developments can be used to indicate what actions are being taken to meet objectives. Evaluation should be conducted periodically to determine long-term performance. Ideally, evaluations should be gathered from recreationists, managers, and other partners who are

impacted by the fee program. For example, the impact to local communities, especially economic, should be determined and evaluated. Fees have the potential to cause displacement or a change in the profile of recreationists visiting an area (Rosenthal et al., 1984), and this in turn can have a notable impact to local communities' economies and culture. Response may be divided, with businesses wary of fees that may deter business, and residents who may be relieved at reduced congestion nearby. While it is not the agency's main responsibility to ensure economic stability or harmony, developing a responsive approach is more likely to gain acceptance for fee programs.

Summary points to consider in conducting program evaluation:

- Evaluations are a required component of fee demonstration programs.
- Fee programs should include a plan for evaluation, including an assessment of whether program objectives were met, how revenues were used (demonstration of improvements), visitors' evaluations, and managers' perspectives.
- An evaluation of the fee programs should be based on whether objectives were met. Objectives should be measurable and timely targets, specifying desired provision, maintenance, and/or improvements in quality of visitor experiences and responsible resource management.
- Evaluations of the fee programs should consider the impacts to recreationists (both at the site and ideally, those displaced), managers, partners, and others potentially impacted by fee programs (e.g., local communities, private sector businesses).

FUTURE OF FEE PROGRAMS

For the foreseeable future, fees will be used to supplement funding sources no longer sufficient for basic operations or other needs. In 2000, nearly 400 public land locations managed by the four participating natural resource agencies had levied fees and collected nearly $200 million total. While it is not a large portion of these agencies' budgets, that amount is likely to increase. The Bush Administration has already requested a four year extension, to 2002, of user fees on Department of Interior and Forest Service lands, and suggested increases in recreation fees charged by the Army Corps of Engineers (Adams & Anderson, 2001).

However, some environmental groups criticize the President's request that 60% of fees collected by used to address a maintenance backlog (Daerr, 2001). According to Phil Voorhees, of the National Parks and Conservation Association, allocations in the President's budget for National Parks alone appear to have increased by only one percent, "all to be spent on the maintenance backlog" (Daerr, 2001). Rosalyn Fennell, director of national parks programs for the Wilderness Society, points out that the "fee money was intended to supplement, not supplant, appropriated funds." This has become a realized of fear of the public, that fees would not be used to improve public land management, but to simply maintain the current and possibly inadequate level of recreational services, or worse to simply hire personnel to enforce the fees (Clifford, 2001).

Overall, environmental groups are split in their support, with some seeing the benefits and others fearing the long-term ramifications of turning to a fee-based system. Some environmental groups are forming coalitions to monitor or even protest fees using lobbying (Daerr, 2001). Activist groups like the Sierra Club (McManus, 1999) and American Lands Alliance worry that the public recreation will become a commercial enterprise and that agencies will begin operating like businesses (Hayhurst, 2001; McManus, 1999; Watzman, 2001). They argue that appropriations should be adjusted, not user fees (McManus, 1999). Use of fees may tempt agencies to focus on projects that increase visitation, and thus fee revenue, rather than focusing on quality recreation experiences and protection of natural resources (Watzman, 2001). Scott Silver, executive director of Wild Wilderness founded his organization specifically to fight recreational user fees (Hayhurst, 2001). Grassroot groups, such as the Western Slope NoFee Coalition in Ouray, Colorado, are arranging organized protests or even encouraging civil disobedience by refusing to pay the fees (Clifford, 2001). Violators are fined $25 to $50 for not

paying the user fees. In late 2001, a case concerning a fee protest, which occurred at Oregon Dunes National Recreation Area, will be the first to reach the U.S. District Court level. However, in most cases where recreationists have refused to pay fees, little or no legal action has been taken against them (Woodside, Morris, Newquist, and Purdue, 2000).

As fee programs become more ubiquitous, it may be that they eventually are seen as a normal expectation of recreating on public lands. Some foresee that the fee program will be the method for ensuring that recreation sites become financially self-suffience (Fretwell, 2000). Nonetheless, a smooth transition to their use and acceptability is desirable and can be facilitated by continued evaluation for what works and what doesn't, in terms of compliance, cost effectiveness, and improved recreation services.

CONCLUSION

Fee demonstration programs are an increasingly important resource for agencies and especially site managers. Because appropriated funds are not keeping up with the demand for outdoor recreation opportunities, agencies must seek new resources for maintaining and improving management. Fees have the potential to ensure quality visitor experiences and responsible resource management. To incorporate fee programs for a site, managers should have a strong justification for the fee program and clear objectives. The success of fee programs relies on public acceptance of and compliance with fees. Acceptance is improved by seeking the public's input on how fees should be used, giving an accurate accounting of costs, and maintaining communication regarding the fee program. While evaluation of a program for a site is based on determining whether objectives were met, there is still a need to develop goals and objectives at the agency level, indicating how fee programs are being used to meet agency missions of resource stewardship and providing quality recreation experiences. While this paper

described recent studies and literature, there is a real need for further research and insight into fee programs. Watson & Herath (1999) reviewed special issues of *Journal of Leisure Research* and *Journal of Park and Recreation Administration* and discussed how research could be used to help address essential questions surrounding fee programs:

1) What are the tradeoffs between a collective perspective of the public versus a consumer point of view?

2) Do fees change the roles of visitor and agency to that of buyer and seller?

3) When should bees be charged and how should revenues be used?

4) Does the public support fees?

5) Who is most affected by fees?

6) Can managers assess effects of policy on visitors without research?

7) How can science become an integral part of policy formulation?

Answering these questions and providing a methodologically sound evaluation of fee programs can help indicate how these programs are performing and how to improve them. Fee sites are still considered "demonstrations" so it is important to demonstrate accountability and progress so that fees, as controversial as they are, are still an available option for the future.

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